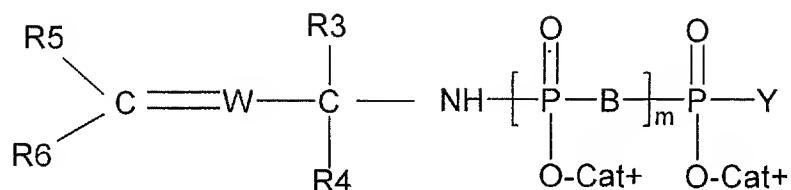


## In the Claims

1-22 (canceled).

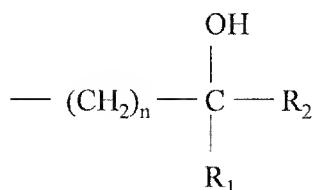
23 (currently amended). A composition of matter comprising compound selected from:

a)

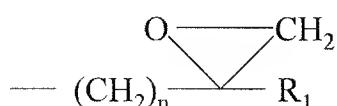


### Formula (X)

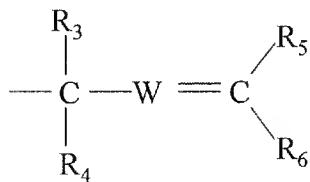
in which  $R_3$ ,  $R_4$ , and  $R_5$ , identical or different, are a hydrogen or ( $C_1$ - $C_3$ )alkyl group,  $W$  is  $-CH-$  or  $-N-$ ,  $R_6$  is an ( $C_2$ - $C_3$ )acyl, an aldehyde, an ( $C_1$ - $C_3$ )alcohol, or an ( $C_2$ - $C_3$ )ester,  $Cat^+$  represents one or several identical or different organic or mineral cation(s) including the proton  $H^+$ ,  $Na^+$ ,  $NH_4^+$ ,  $K^+$ ,  $Li^+$ ,  $(CH_3CH_2)_3NH^+$ , lysine or any other suitable pharmaceutically acceptable cation,  $B$  is  $O$  or  $NH$ ,  $m$  is an integer from 1 to 3, and  $Y$  is  $O^-Cat^+$ , a nucleoside, or a radical  $-A-R$ , wherein  $A$  is  $O$ ,  $NH$ ,  $CHF$ ,  $CF_2$  or  $CH_2$ , and  $R$  is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>2</sub>-C<sub>3</sub>)acyl;

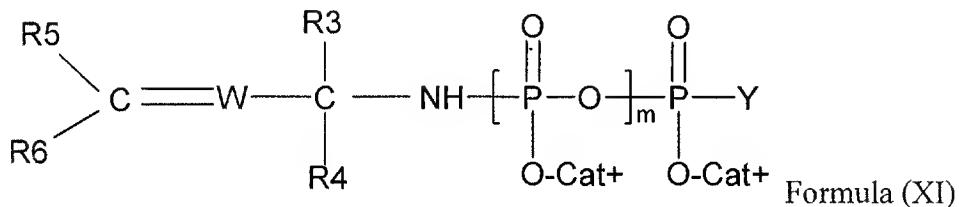


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and

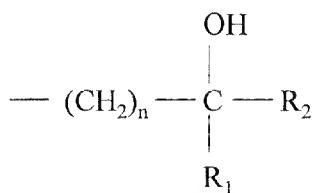


wherein R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, and R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester;

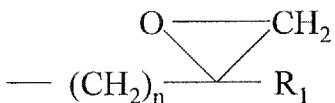
b)



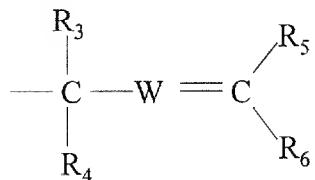
in which R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester, Cat<sup>+</sup> represents one or several identical or different organic or mineral cation(s) including the proton H<sup>+</sup>, Na<sup>+</sup>, NH<sub>4</sub><sup>+</sup>, K<sup>+</sup>, Li<sup>+</sup>, (CH<sub>3</sub>CH<sub>2</sub>)<sub>3</sub>NH<sup>+</sup>, lysine or any other suitable pharmaceutically acceptable cation, B is O or NH, m is an integer from 1 to 3, and Y is O'Cat<sup>+</sup>, a nucleoside, or a radical -A-R, wherein A is O, NH, CHF, CF<sub>2</sub> or CH<sub>2</sub>, and R is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>2</sub>-C<sub>3</sub>)acyl;

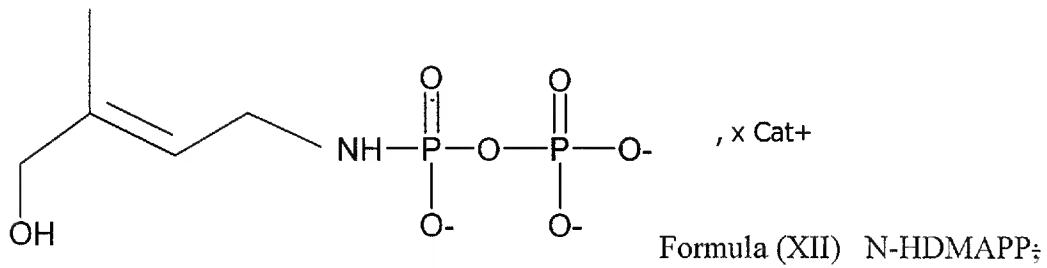


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and



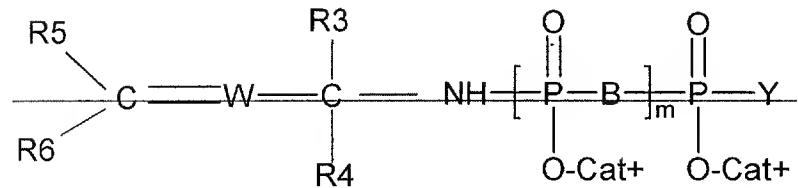
wherein R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, and R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester; or

c)



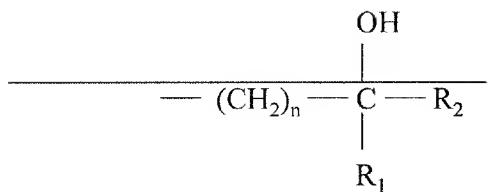
d) a composition comprising a carrier and:

i)

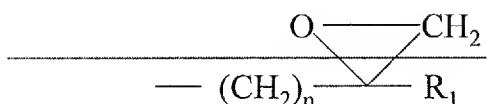


Formula (X)

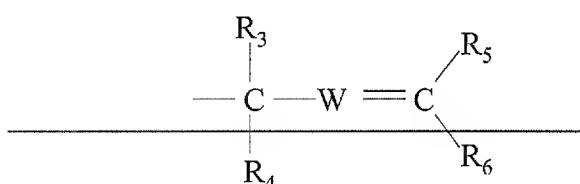
in which R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester, Cat+ represents one or several identical or different organic or mineral cation(s) including the proton, B is O or NH, m is an integer from 1 to 3, and Y is O Cat+, a nucleoside, or a radical A-R, wherein A is O, NH, CHF, CF<sub>2</sub> or CH<sub>2</sub>, and R is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy (C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acetyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy (C<sub>2</sub>-C<sub>3</sub>)acetyl;

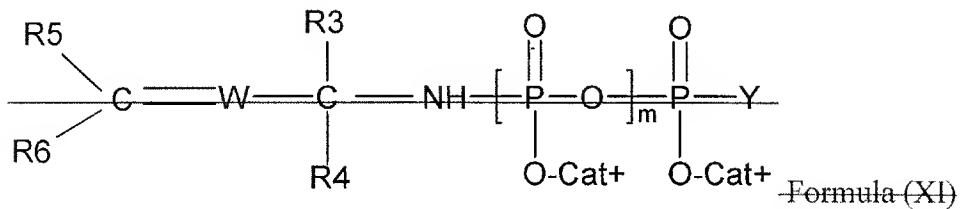


wherein  $n$  is an integer from 2 to 20, and  $R_1$  is a methyl or ethyl group; and

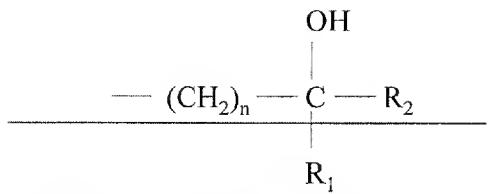


wherein  $R_3$ ,  $R_4$ , and  $R_5$ , identical or different, are a hydrogen or  $(C_4-C_9)$ alkyl group,  $W$  is  $-\text{CH}-$  or  $-\text{N}-$ , and  $R_6$  is an  $(C_2-C_9)$ acyl, an aldehyde, an  $(C_1-C_9)$ alcohol, or an  $(C_2-C_9)$ ester;

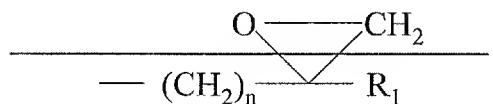
— ii )



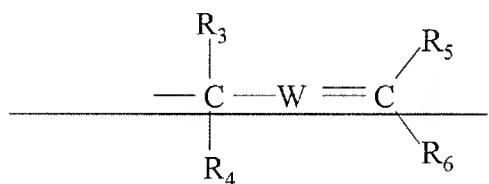
in which  $R_3$ ,  $R_4$ , and  $R_5$ , identical or different, are a hydrogen or  $(C_1-C_3)$ alkyl group, W is  $-CH-$  or  $N-$ ,  $R_6$  is an  $(C_2-C_3)$ acyl, an aldehyde, an  $(C_4-C_3)$ alcohol, or an  $(C_2-C_3)$ ester,  $Cat^+$  represents one or several, identical or different organic or mineral cation(s) including the proton, B is O or NH, m is an integer from 1 to 3, and Y is  $O^-Cat^+$ , a nucleoside, or a radical  $-A-R$ , wherein A is O, NH, CHF,  $CF_2$  or  $CH_2$ , and R is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy (C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acetyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy (C<sub>2</sub>-C<sub>3</sub>)acetyl;

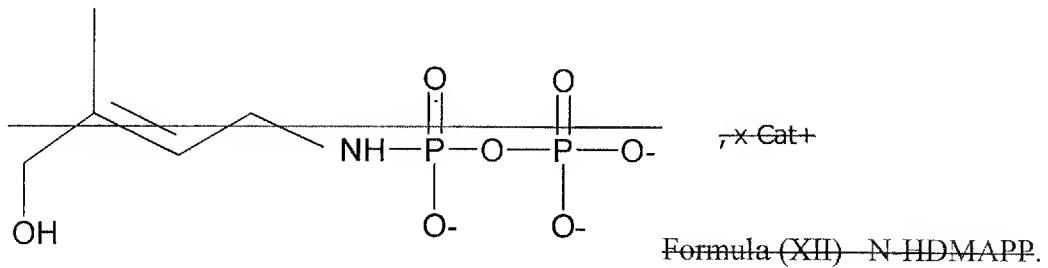


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and



wherein  $R_3$ ,  $R_4$ , and  $R_5$ , identical or different, are a hydrogen or  $(C_1-C_3)$ alkyl group,  $W$  is  $-CH-$  or  $-N-$ , and  $R_6$  is an  $(C_2-C_3)$ acyl, an aldehyde, an  $(C_1-C_3)$ alcohol, or an  $(C_2-C_3)$ ester;

iii)



24 (currently amended). The composition of matter according to claim 23 according to claim 37, wherein said carrier is an adjuvant.

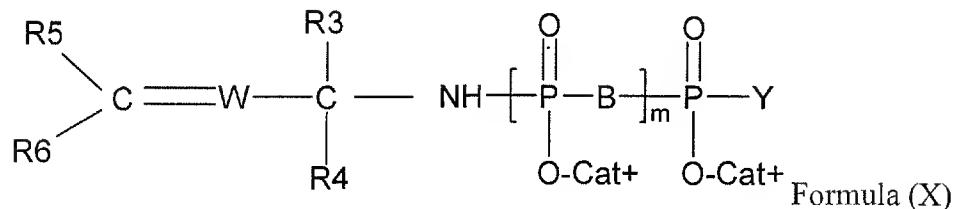
25 (currently amended). The composition-of-matter according to claim 24, wherein said composition of matter further comprises an antigen selected from a microbial antigen, a viral antigen, a bacterial antigen, a fungal antigen, a protozoan antigen, a yeast antigen, a parasite antigen, a *Mycobacterium bovis* antigen or a tumoral antigen.

26 (currently amended). The composition-of-matter according to claim 23 according to claim 37, wherein said carrier is a pharmaceutically acceptable carrier.

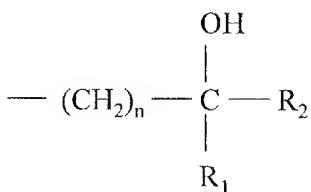
27-30 (canceled).

31 (withdrawn-currently amended). A method of activation activating a  $\gamma\delta$  T cell, the method comprising bringing a  $\gamma\delta$  T cell into contact with a composition comprising a  $\gamma\delta$  T cell activator selected from the group consisting of:

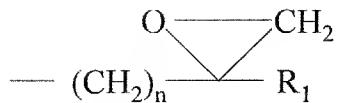
a)



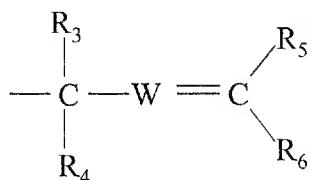
in which R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester, Cat<sup>+</sup> represents one or several identical or different organic or mineral cation(s) including the proton, B is O or NH, m is an integer from 1 to 3, and Y is O'Cat<sup>+</sup>, a nucleoside, or a radical -A-R, wherein A is O, NH, CHF, CF<sub>2</sub> or CH<sub>2</sub>, and R is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>2</sub>-C<sub>3</sub>)acyl;

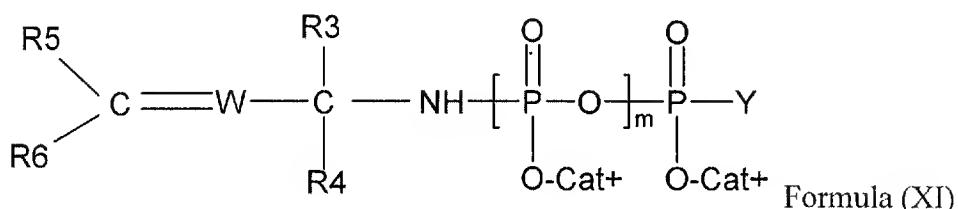


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and

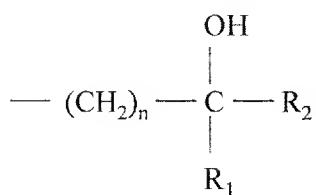


wherein R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, and R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester;

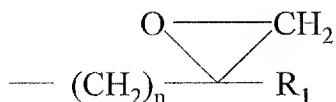
b)



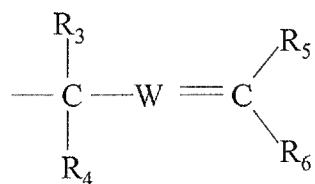
in which  $R_3$ ,  $R_4$ , and  $R_5$ , identical or different, are a hydrogen or  $(C_1-C_3)$ alkyl group,  $W$  is  $-CH-$  or  $-N-$ ,  $R_6$  is an  $(C_2-C_3)$ acyl, an aldehyde, an  $(C_1-C_3)$ alcohol, or an  $(C_2-C_3)$ ester,  $Cat^+$  represents one or several identical or different organic or mineral cation(s) including the proton,  $B$  is  $O$  or  $NH$ ,  $m$  is an integer from 1 to 3, and  $Y$  is  $O^-Cat^+$ , a nucleoside, or a radical  $-A-R$ , wherein  $A$  is  $O$ ,  $NH$ ,  $CHF$ ,  $CF_2$  or  $CH_2$ , and  $R$  is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>2</sub>-C<sub>3</sub>)acyl;

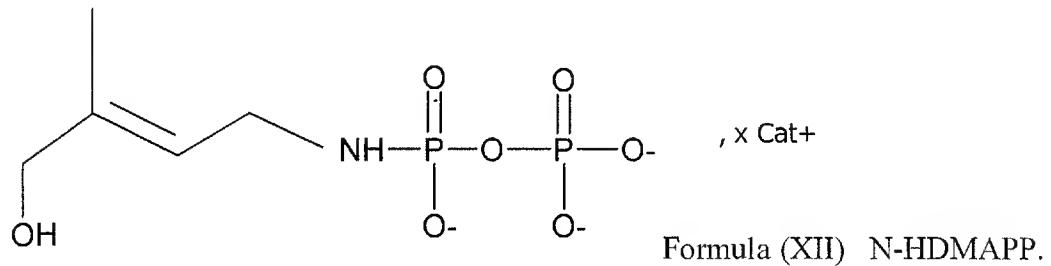


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and



wherein R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, and R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester; and

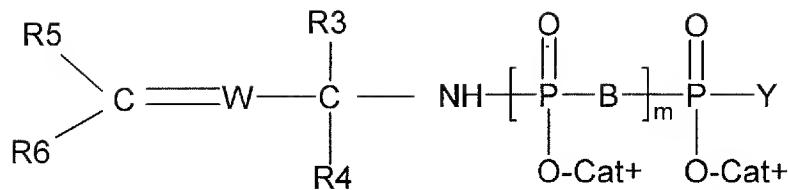
c)



32 (withdrawn). The method according to claim 31 wherein the  $\gamma\delta$  T cell is brought into contact with said  $\gamma\delta$  T cell activator in vitro.

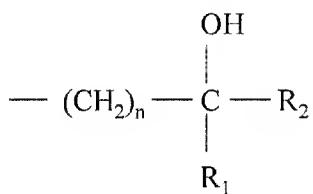
33 (withdrawn-currently amended). A method of immunotherapy or stimulation of an immune response comprising the administration of a composition comprising a  $\gamma\delta$  T cell activator selected from the group consisting of:

a)

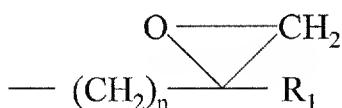


Formula (X)

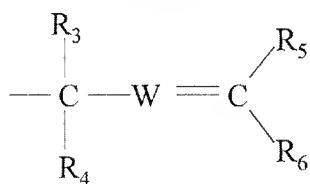
in which R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester, Cat<sup>+</sup> represents one or several identical or different organic or mineral cation(s) including the proton, B is O or NH, m is an integer from 1 to 3, and Y is O<sup>-</sup>Cat<sup>+</sup>, a nucleoside, or a radical -A-R, wherein A is O, NH, CHF, CF<sub>2</sub> or CH<sub>2</sub>, and R is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>2</sub>-C<sub>3</sub>)acyl;

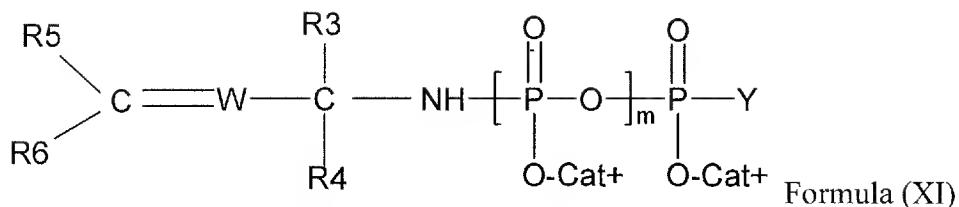


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and

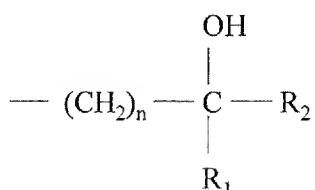


wherein R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, and R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester;

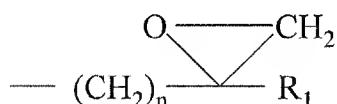
b)



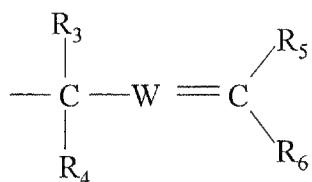
in which  $R_3$ ,  $R_4$ , and  $R_5$ , identical or different, are a hydrogen or ( $C_1$ - $C_3$ )alkyl group,  $W$  is  $-CH-$  or  $-N-$ ,  $R_6$  is an ( $C_2$ - $C_3$ )acyl, an aldehyde, an ( $C_1$ - $C_3$ )alcohol, or an ( $C_2$ - $C_3$ )ester,  $Cat^+$  represents one or several identical or different organic or mineral cation(s) including the proton,  $B$  is  $O$  or  $NH$ ,  $m$  is an integer from 1 to 3, and  $Y$  is  $O^-Cat^+$ , a nucleoside, or a radical  $-A-R$ , wherein  $A$  is  $O$ ,  $NH$ ,  $CHF$ ,  $CF_2$  or  $CH_2$ , and  $R$  is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>2</sub>-C<sub>3</sub>)acyl;

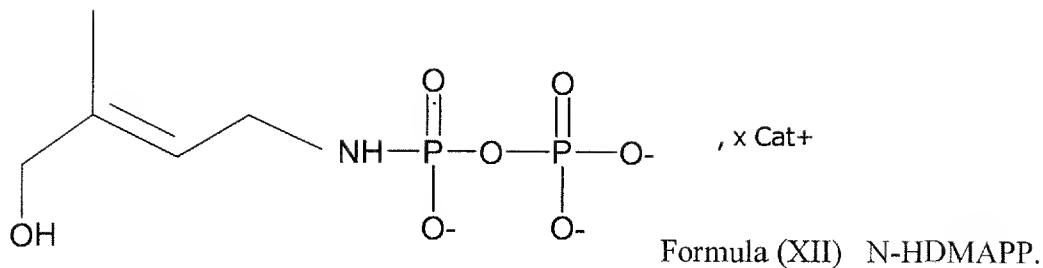


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and



wherein R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, and R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester; or

c)

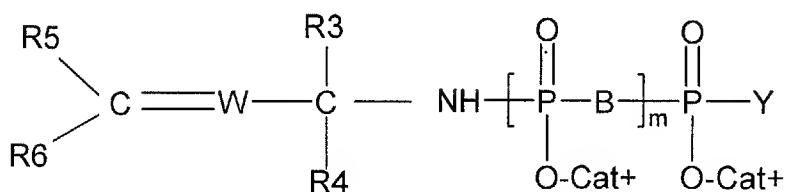


34 (withdrawn). The method according to claim 33, wherein said subject is suffering from a tumor, solid tumor, an infectious disease, or an autoimmune disease or an allergic disease or said subject requires the stimulation of an immune response.

35 (withdrawn). The method according to claim 33, wherein said composition further comprises an antigen.

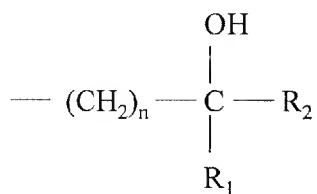
36 (new). A composition comprising a carrier and a compound selected from:

i)

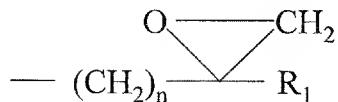


Formula (X)

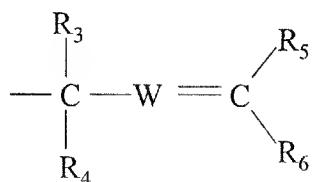
in which R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester, Cat+ represents H<sup>+</sup>, Na<sup>+</sup>, NH<sub>4</sub><sup>+</sup>, K<sup>+</sup>, Li<sup>+</sup>, (CH<sub>3</sub>CH<sub>2</sub>)<sub>3</sub>NH<sup>+</sup>, lysine or any other suitable pharmaceutically acceptable cation, B is O or NH, m is an integer from 1 to 3, and Y is O-Cat+, a nucleoside, or a radical -A-R, wherein A is O, NH, CHF, CF<sub>2</sub> or CH<sub>2</sub>, and R is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>2</sub>-C<sub>3</sub>)acyl;

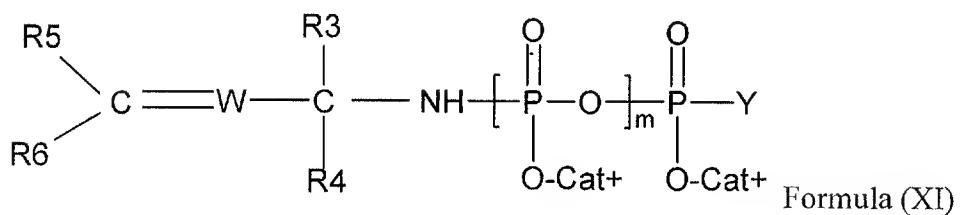


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and

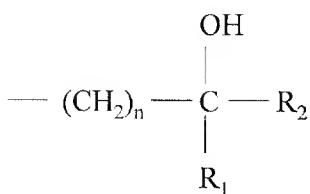


wherein R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, and R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester;

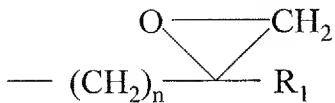
ii)



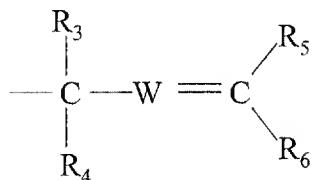
in which  $R_3$ ,  $R_4$ , and  $R_5$ , identical or different, are a hydrogen or  $(C_1-C_3)$ alkyl group,  $W$  is  $-CH-$  or  $-N-$ ,  $R_6$  is an  $(C_2-C_3)$ acyl, an aldehyde, an  $(C_1-C_3)$ alcohol, or an  $(C_2-C_3)$ ester,  $Cat^+$  represents  $H^+$ ,  $Na^+$ ,  $NH_4^+$ ,  $K^+$ ,  $Li^+$ ,  $(CH_3CH_2)_3NH^+$ , lysine or any other suitable pharmaceutically acceptable cation,  $B$  is  $O$  or  $NH$ ,  $m$  is an integer from 1 to 3, and  $Y$  is  $O^-Cat^+$ , a nucleoside, or a radical  $-A-R$ , wherein  $A$  is  $O$ ,  $NH$ ,  $CHF$ ,  $CF_2$  or  $CH_2$ , and  $R$  is selected from the group consisting of:



wherein n is an integer from 2 to 20, R<sub>1</sub> is a (C<sub>1</sub>-C<sub>3</sub>)alkyl group, and R<sub>2</sub> is an halogenated (C<sub>1</sub>-C<sub>3</sub>)alkyl, a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>1</sub>-C<sub>3</sub>)alkyl, an halogenated (C<sub>2</sub>-C<sub>3</sub>)acyl or a (C<sub>1</sub>-C<sub>3</sub>)alkoxy-(C<sub>2</sub>-C<sub>3</sub>)acyl;

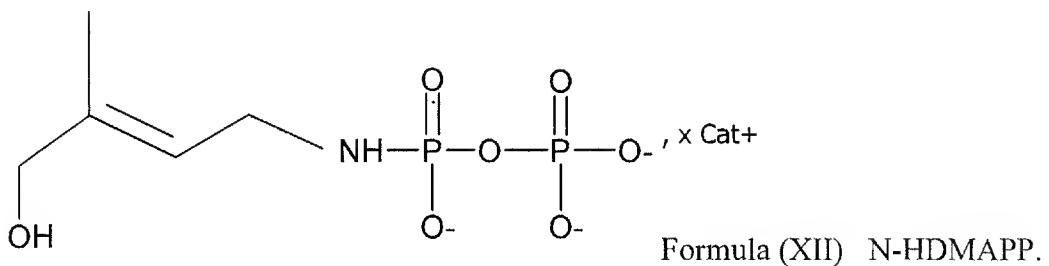


wherein n is an integer from 2 to 20, and R<sub>1</sub> is a methyl or ethyl group; and



wherein R<sub>3</sub>, R<sub>4</sub>, and R<sub>5</sub>, identical or different, are a hydrogen or (C<sub>1</sub>-C<sub>3</sub>)alkyl group, W is -CH- or -N-, and R<sub>6</sub> is an (C<sub>2</sub>-C<sub>3</sub>)acyl, an aldehyde, an (C<sub>1</sub>-C<sub>3</sub>)alcohol, or an (C<sub>2</sub>-C<sub>3</sub>)ester; or

iii)



37 (new). The composition according to claim 36, wherein said compound is:

